

FIGURE 1

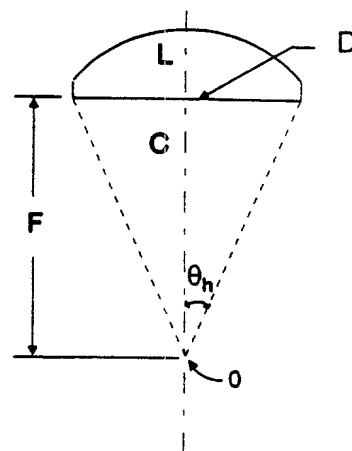


FIGURE 2

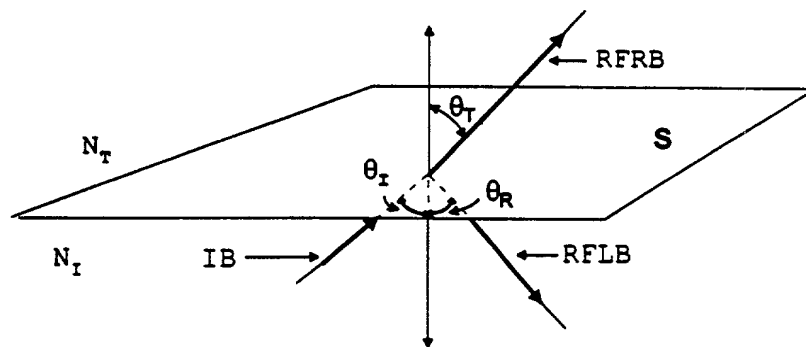


FIGURE 3

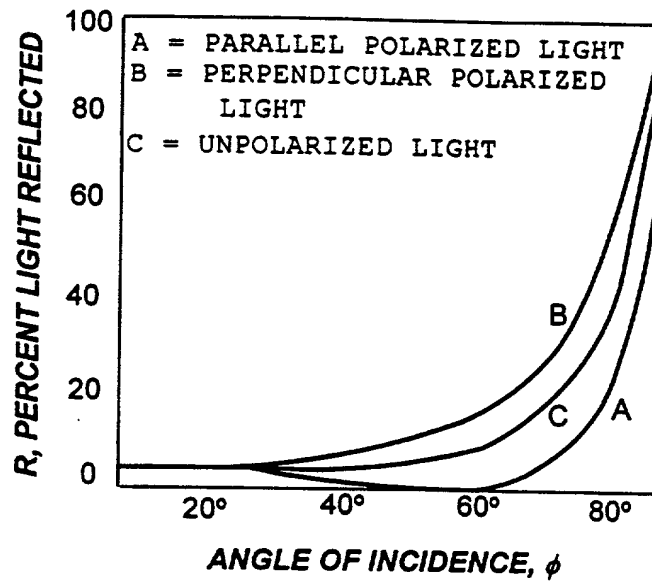


FIGURE 4A

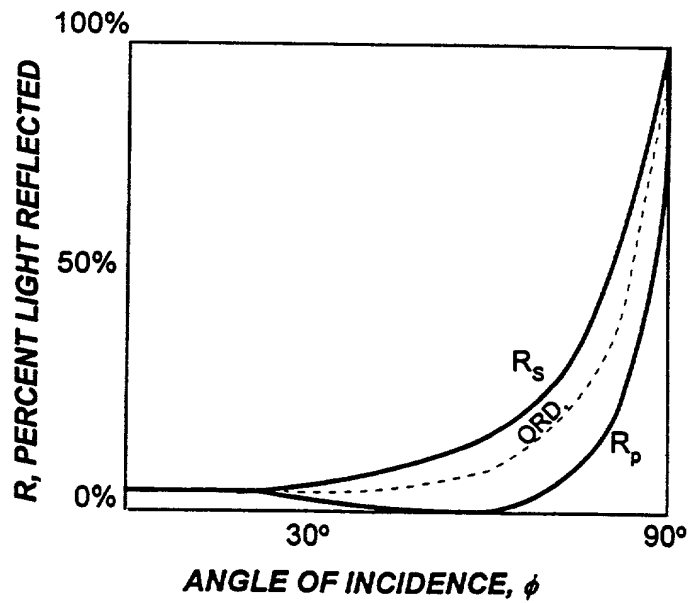


FIGURE 4B

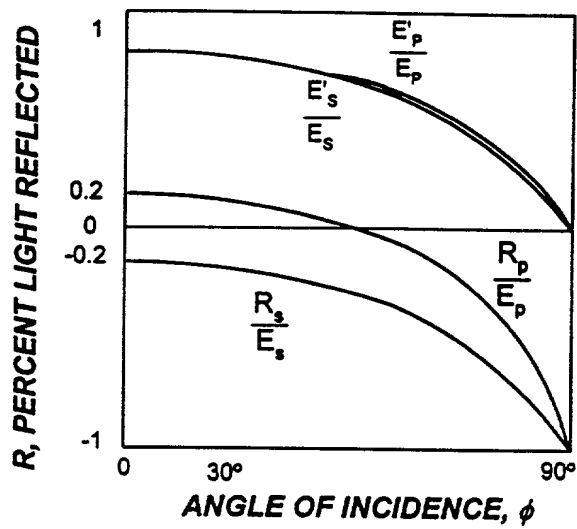


FIGURE 4C

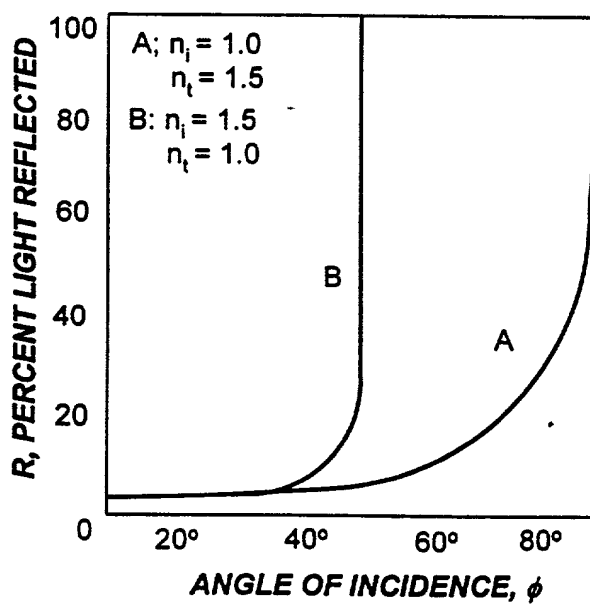


FIGURE 5A

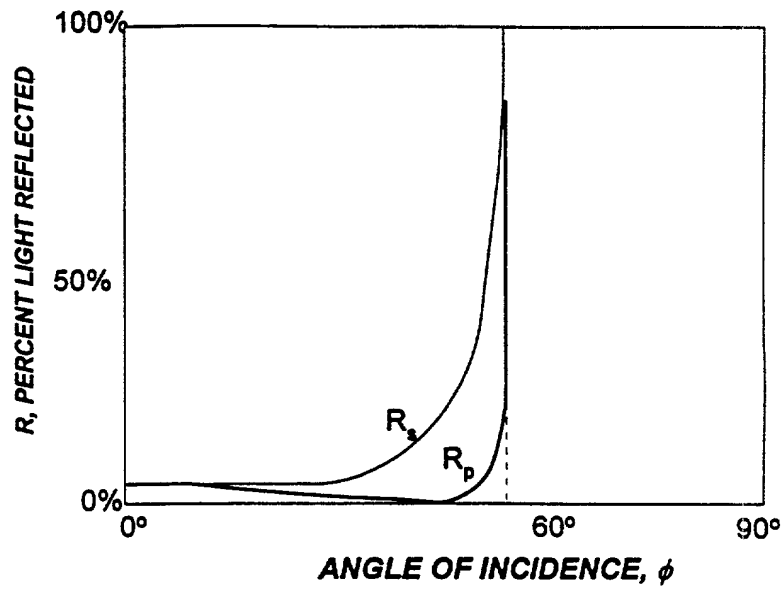


FIGURE 5B

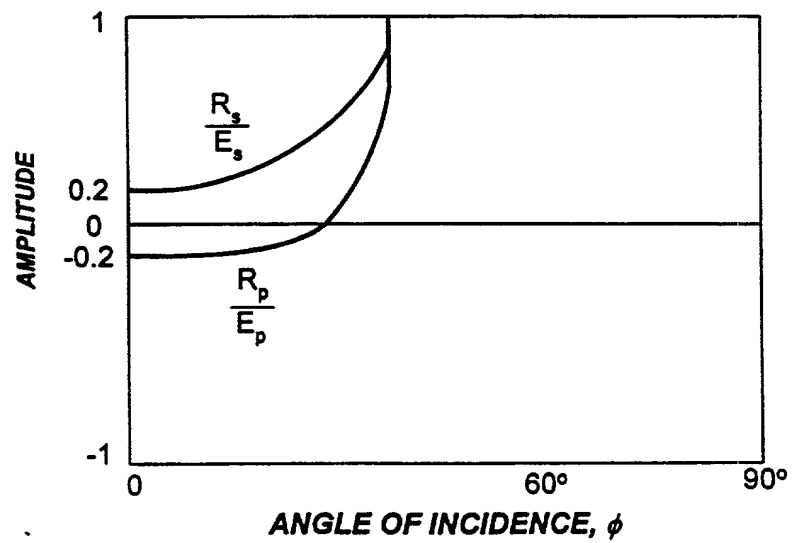


FIGURE 5C

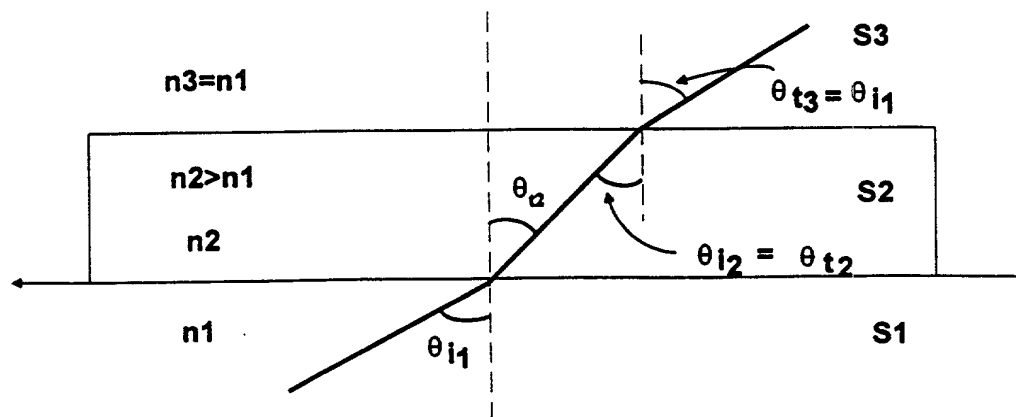


FIGURE 6

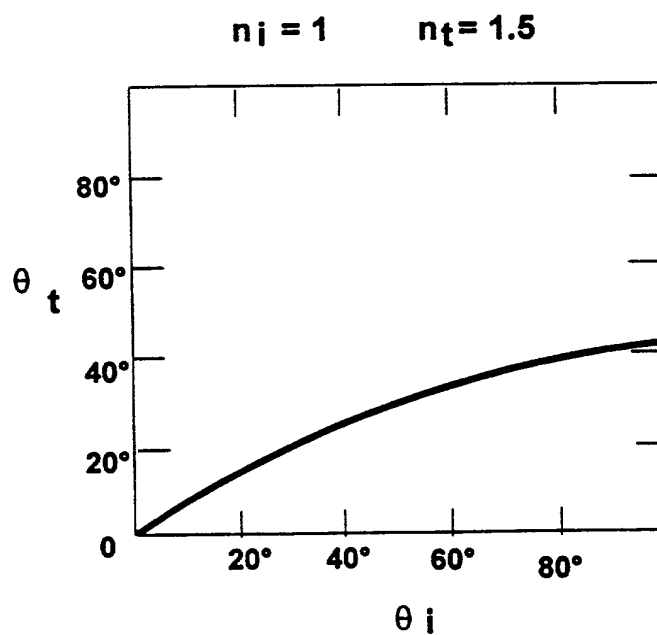


FIGURE 7

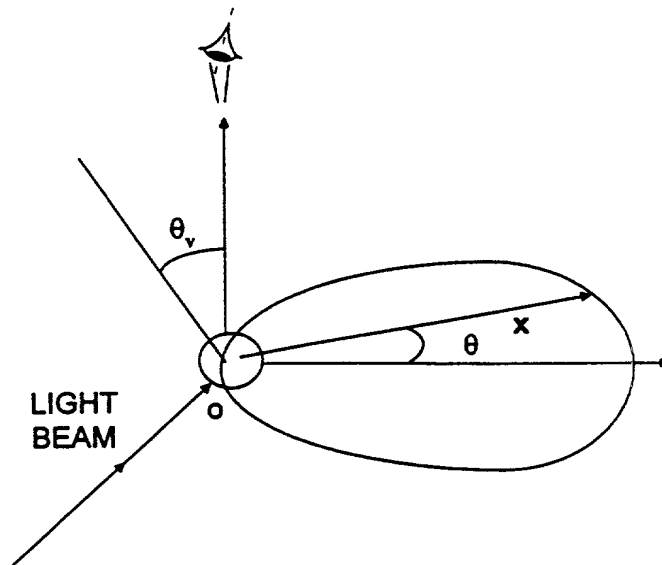


FIGURE 8

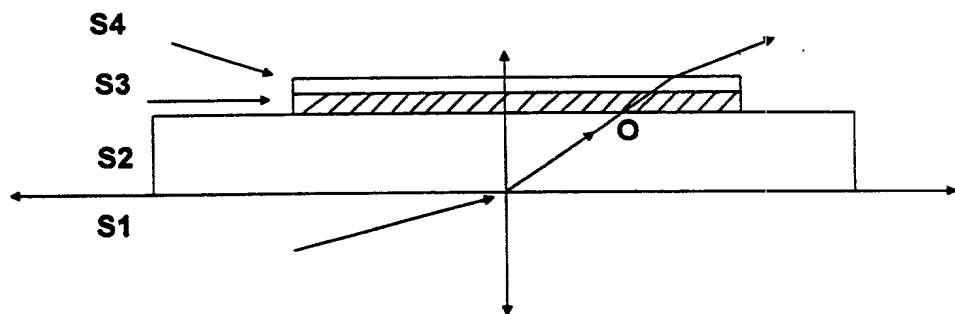


FIGURE 9

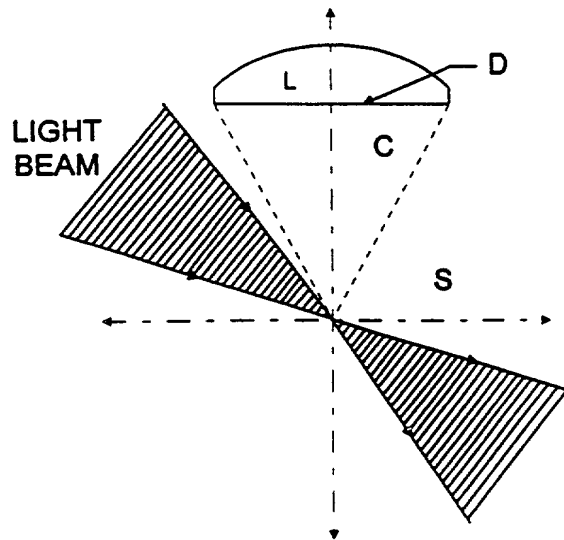


FIGURE 10

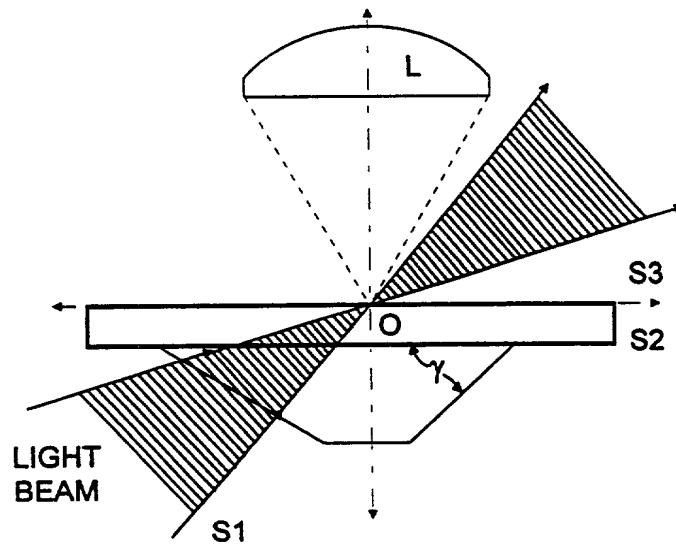


FIGURE 11

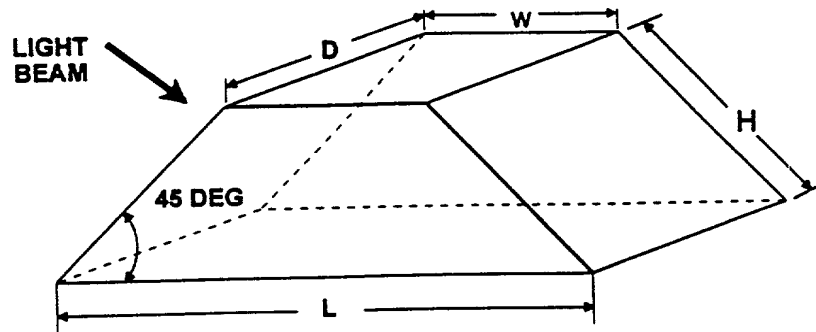


FIGURE 12A

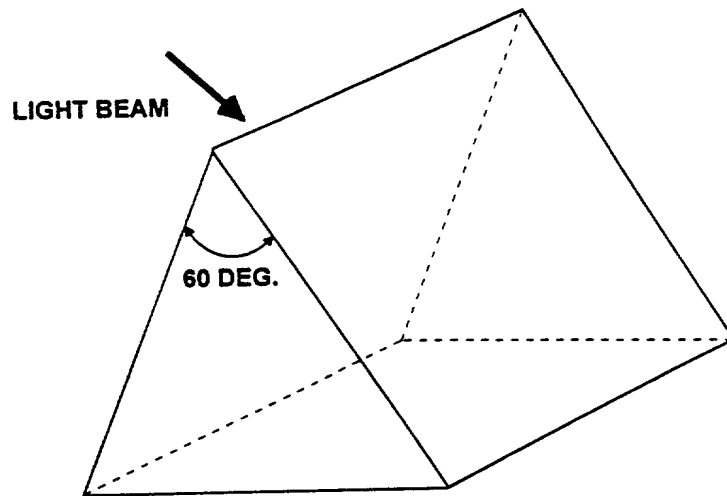
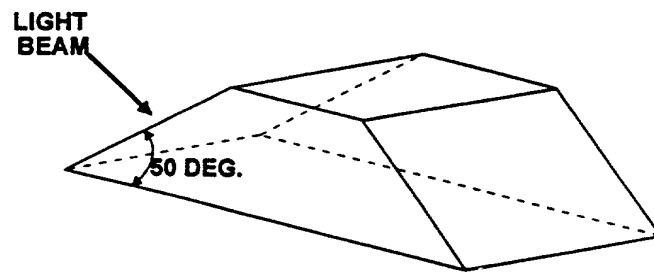


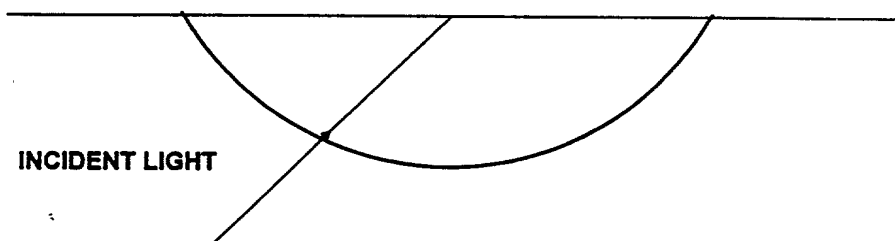
FIGURE 12B

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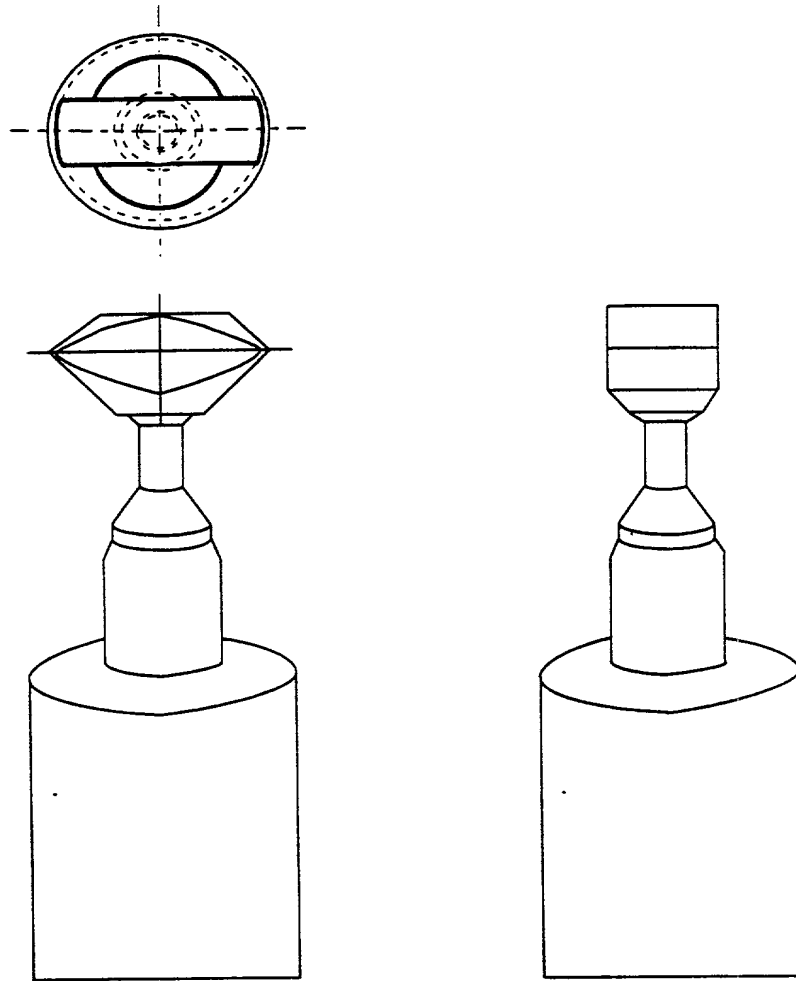


**FIGURE 12C**



**FIGURE 12D**

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NOT TO SCALE

**FIGURE 12E**

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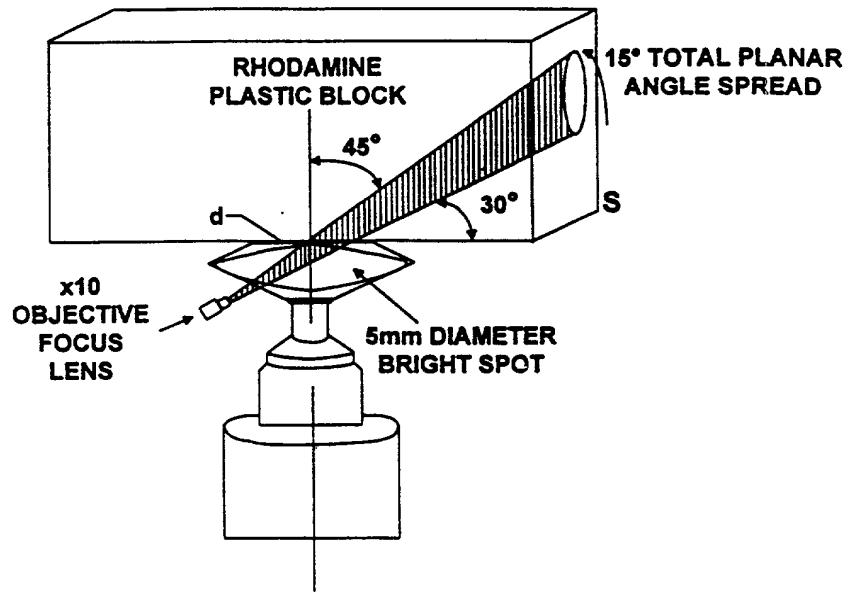


FIGURE 13

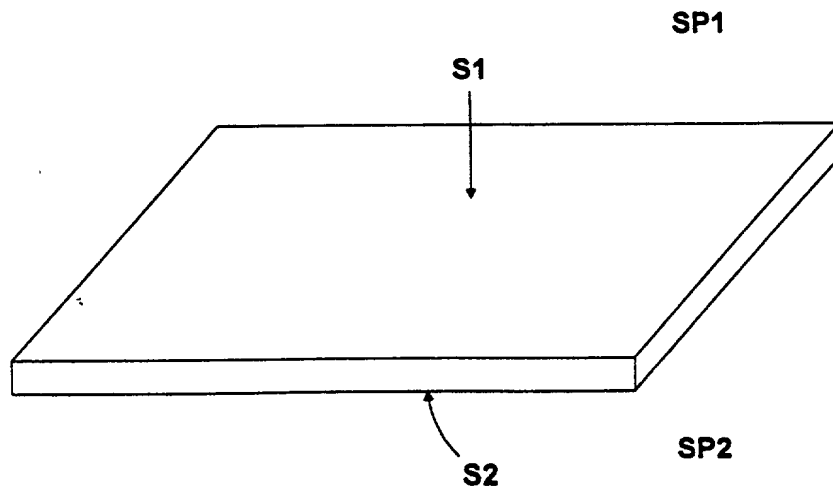


FIGURE 14

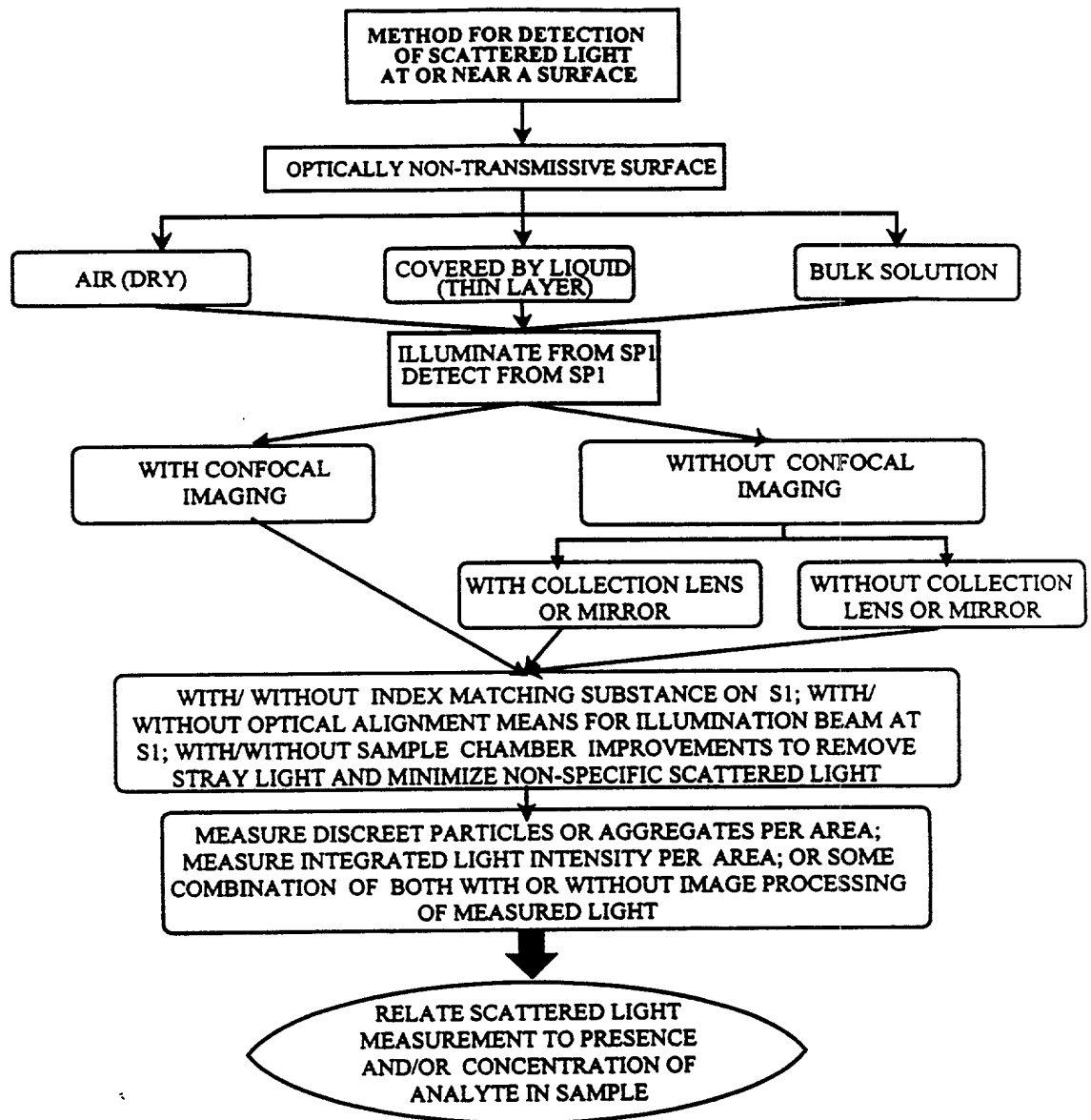


FIGURE 15A

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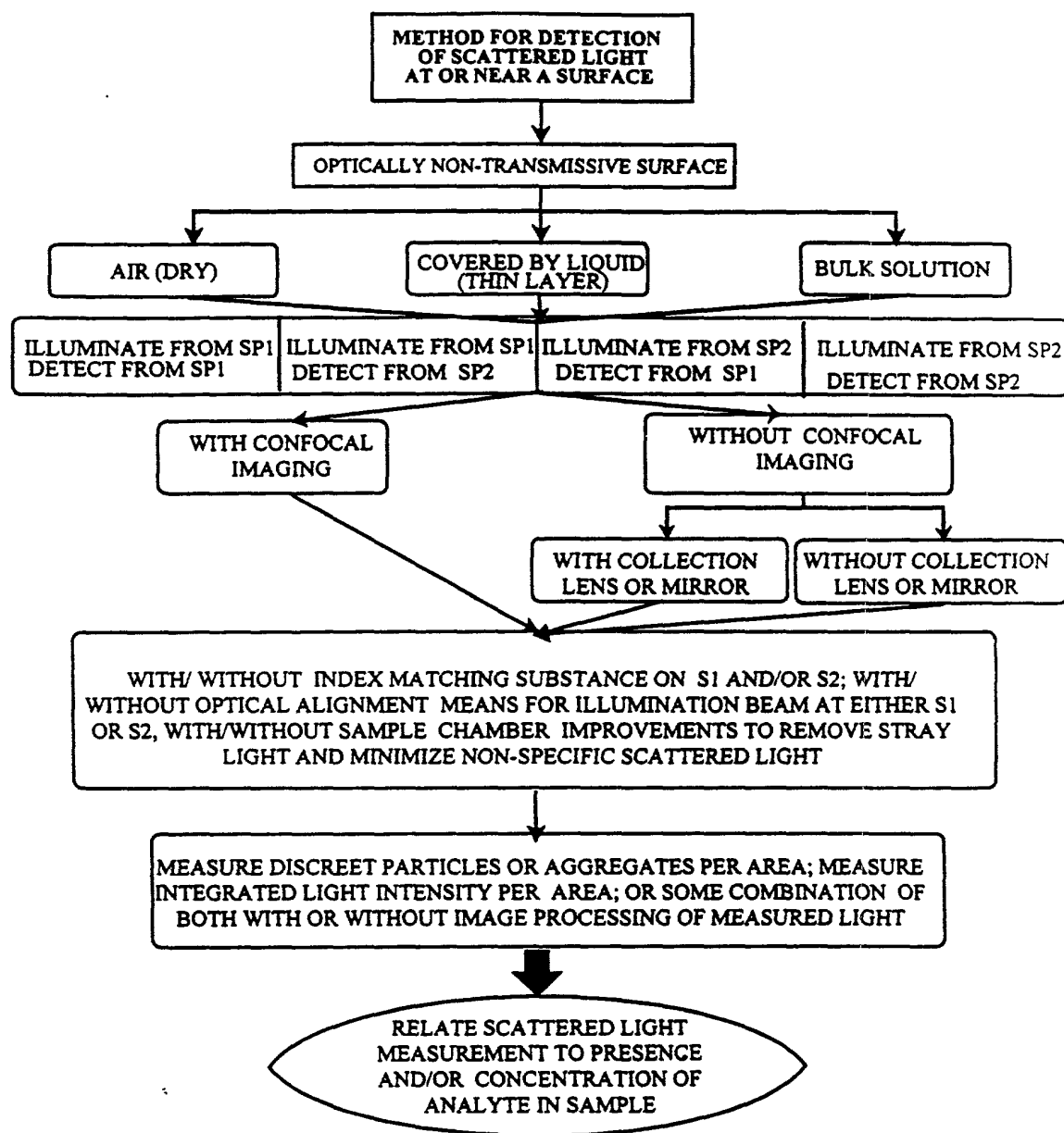


FIGURE 15B

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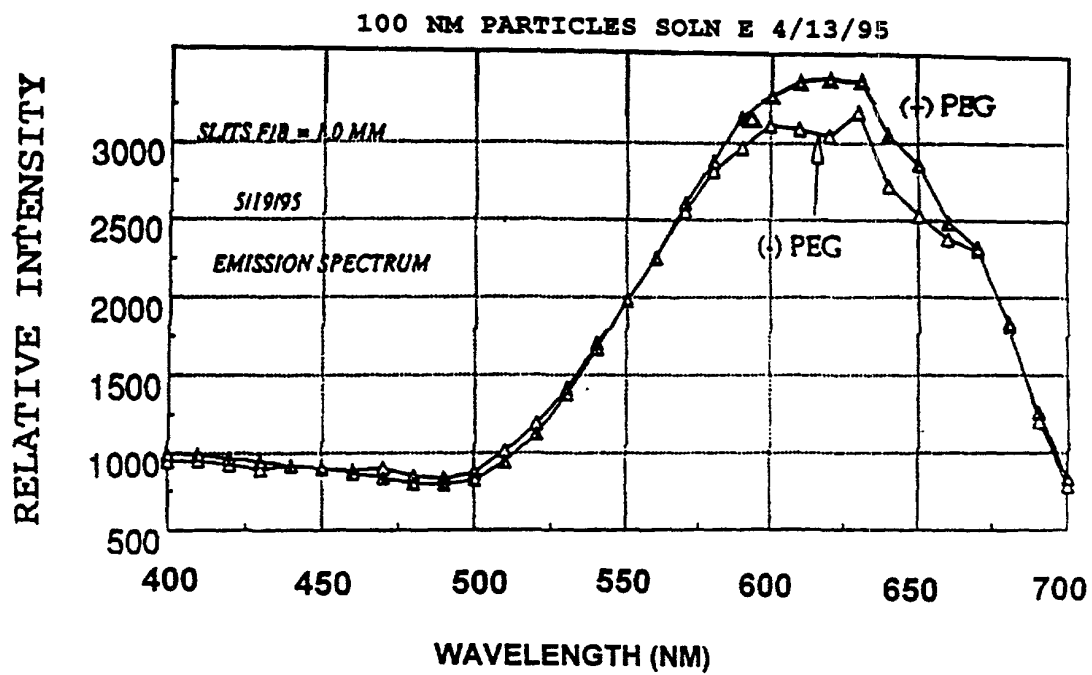


FIGURE 16

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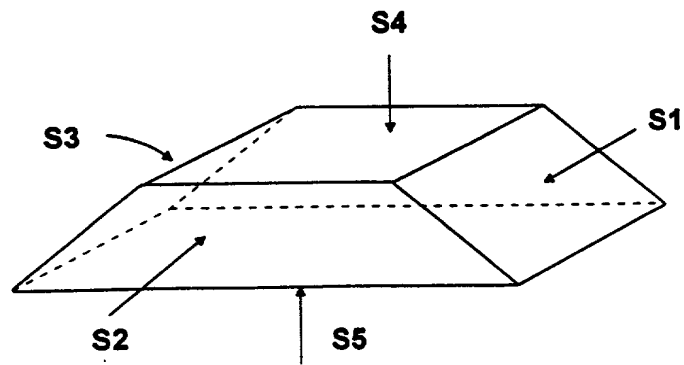


FIGURE 17

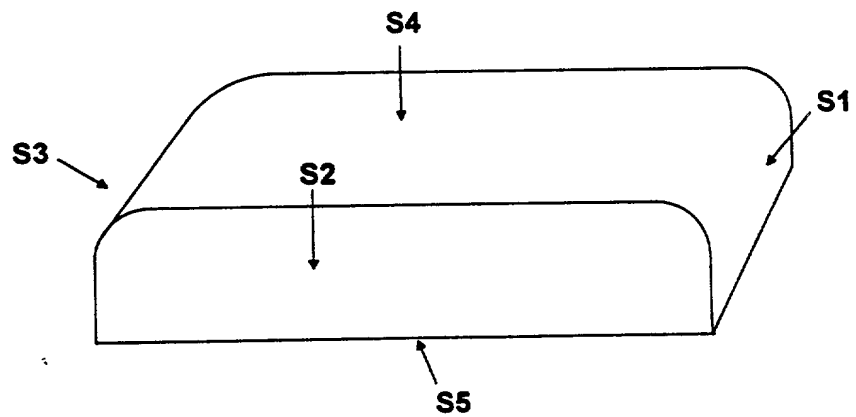


FIGURE 18

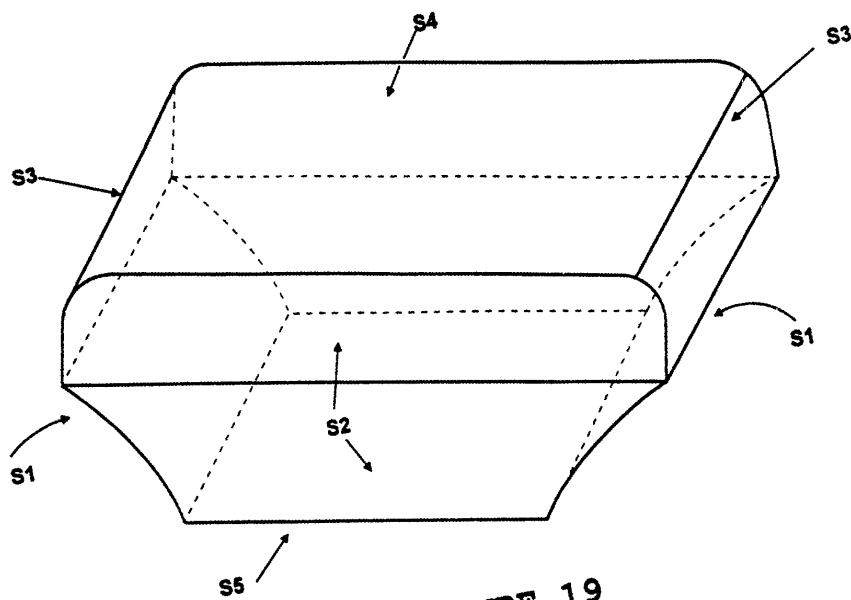


FIGURE 19

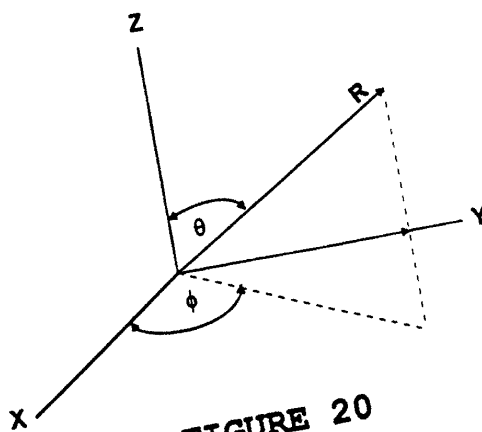
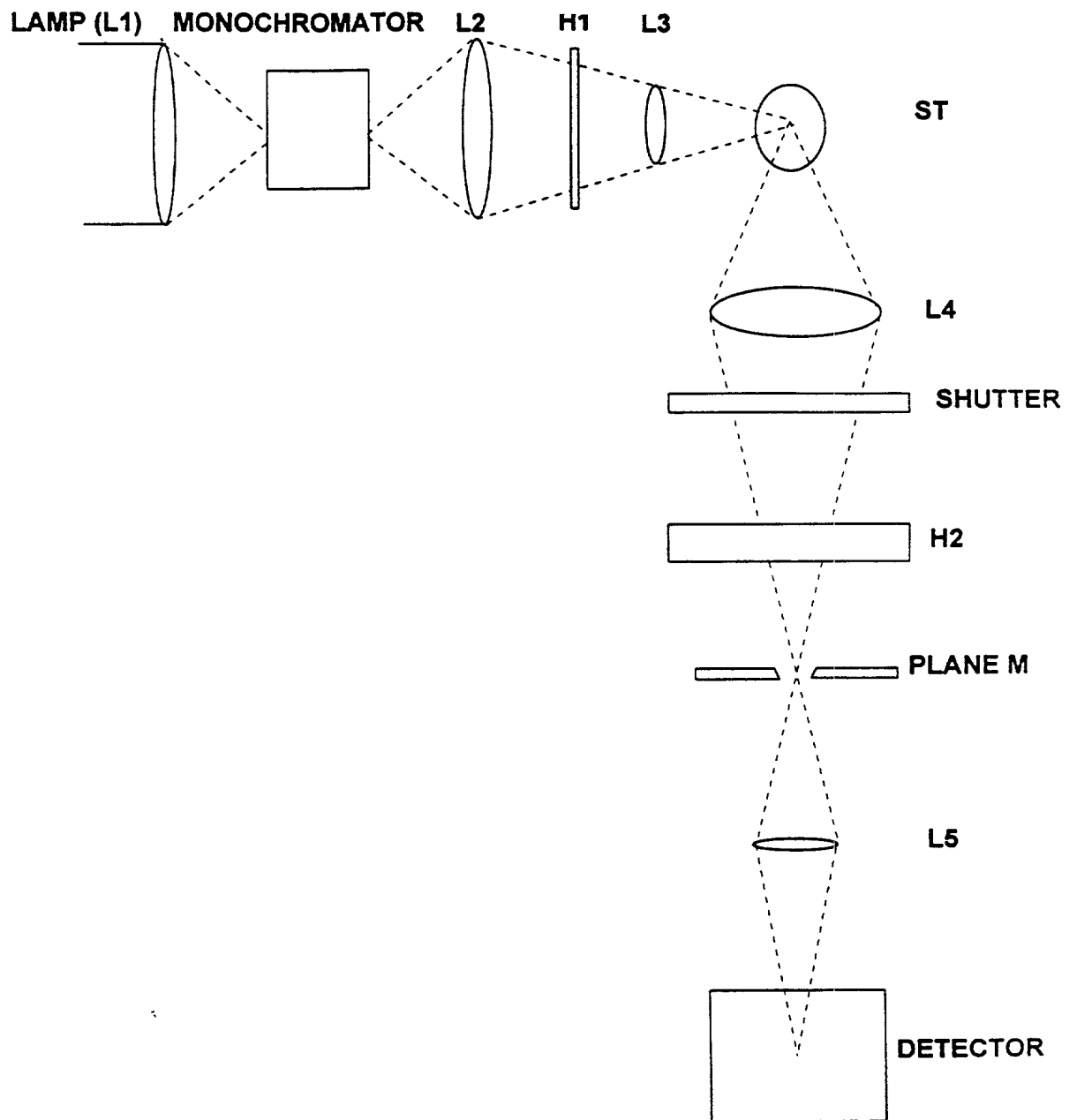


FIGURE 20



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**FIGURE 21**

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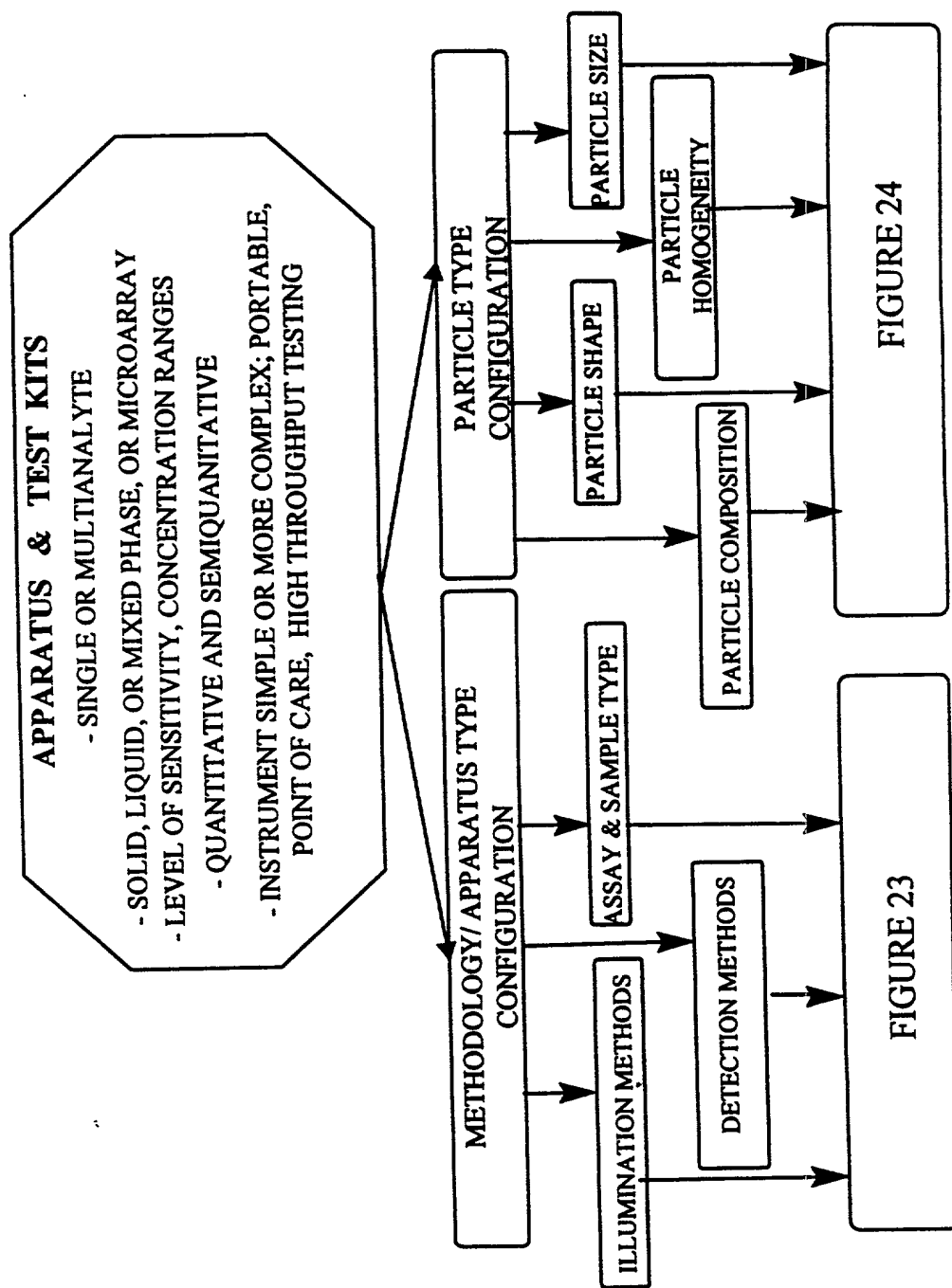


FIGURE 22

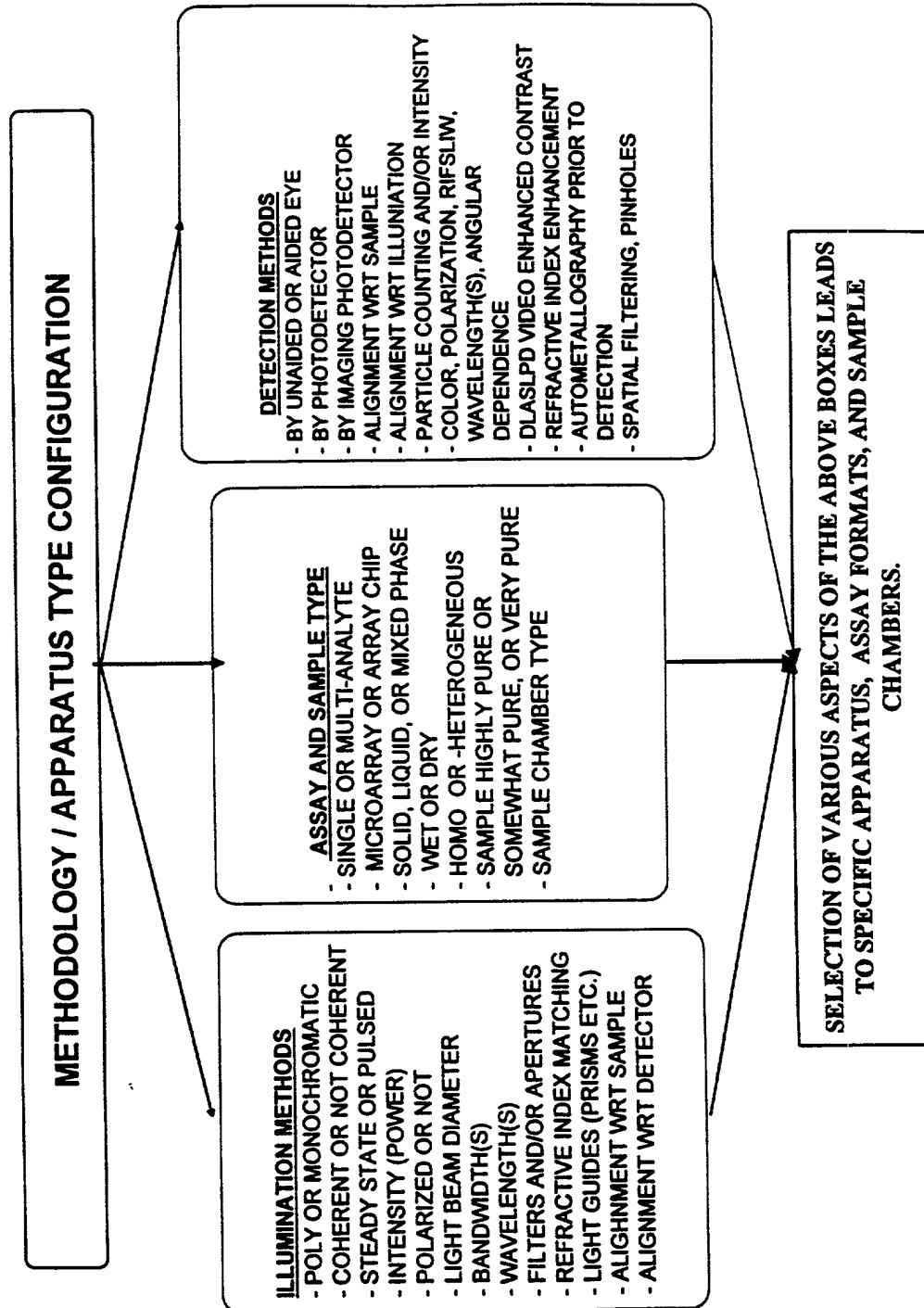


FIGURE 23

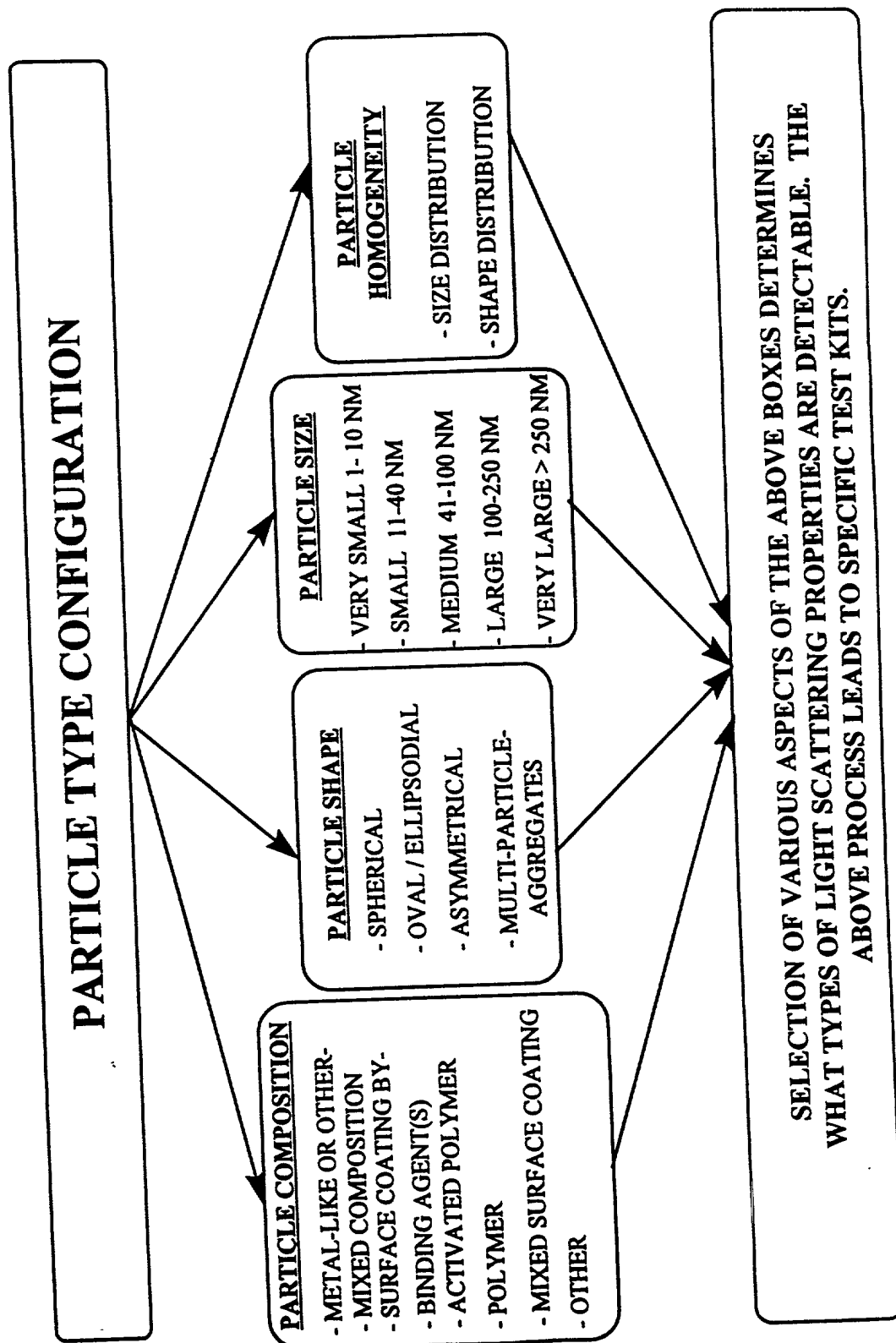


FIGURE 24

**PRACTICE OF INVENTION  
TO A SPECIFIC DIAGNOSTIC NEED  
LEADING TO SPECIFIC APPARATUS AND  
TEST KITS**

**I. ANALYTE  
DETECTION  
REQUIREMENTS  
SPECIFIED**

ANALYTE(S) DETECTION REQUIREMENTS SPECIFIED NUMBER OF DIFFERENT ANALYTES QUANTITATIVE AND/OR SEMI-QUANTITATIVE SENSITIVITY AND CONCENTRATION RANGESAMPLE TYPE AND CONDITION LIQUID, SOLID-PHASE, OR MIXED PHASE, MICRO-ARRAY PURE, SOMEWHAT PURE, NOT PURE TIME TAKEN PER COMPLETION OF ASSAY

**II. APPARATUS  
REQUIREMENTS  
DEFINED**

PORTABLE, POINT OF CARE, HIGH THROUGHPUT TESTING COST, SIZE, PORTABILITY, ROBUSTNESS, LIFECYCLE, SERVICE NEEDS, SAMPLE PROCESSING CAPABILITIES, EASE OF USE

**III. SELECT  
APPARATUS  
COMPONENTS**

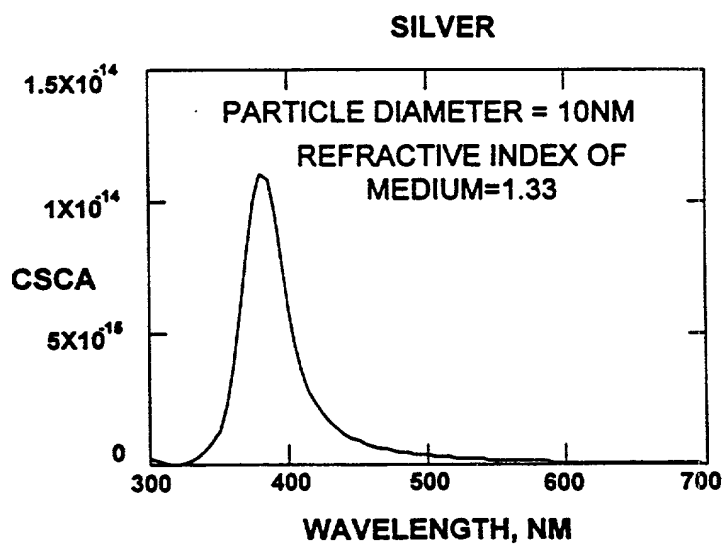
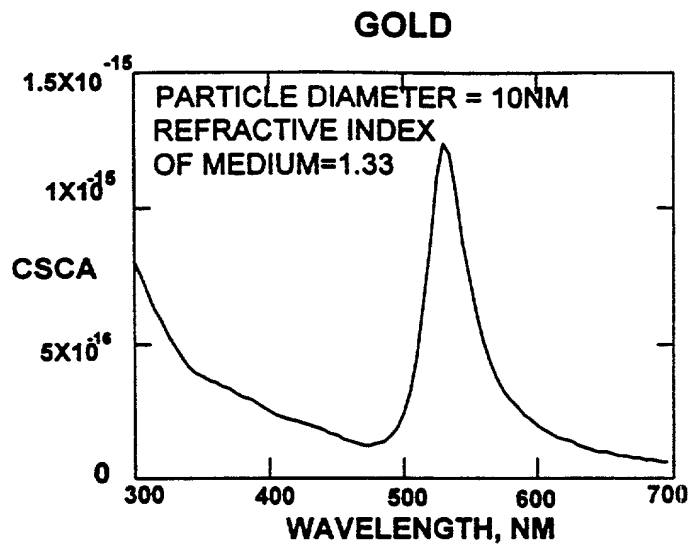
DEFINED SAMPLE TYPES, SAMPLE CHAMBERS, LIGHT SOURCE, DETECTION MEANS, OPTICAL AND ELECTRICAL COMPONENTS, WAVELENGTHS

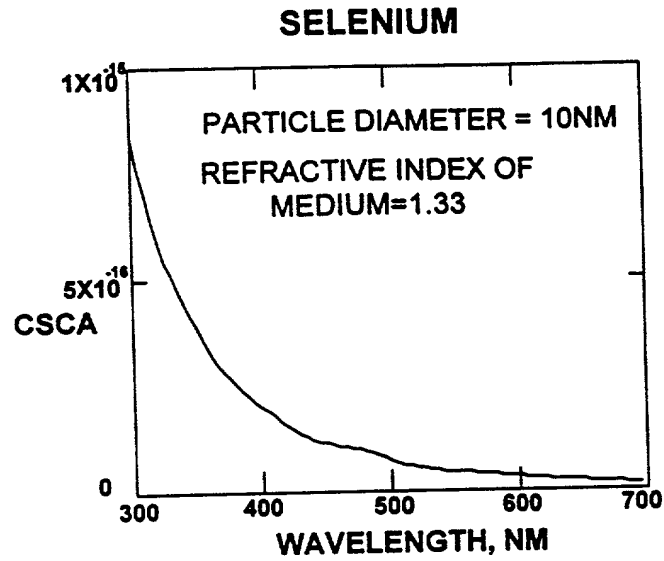
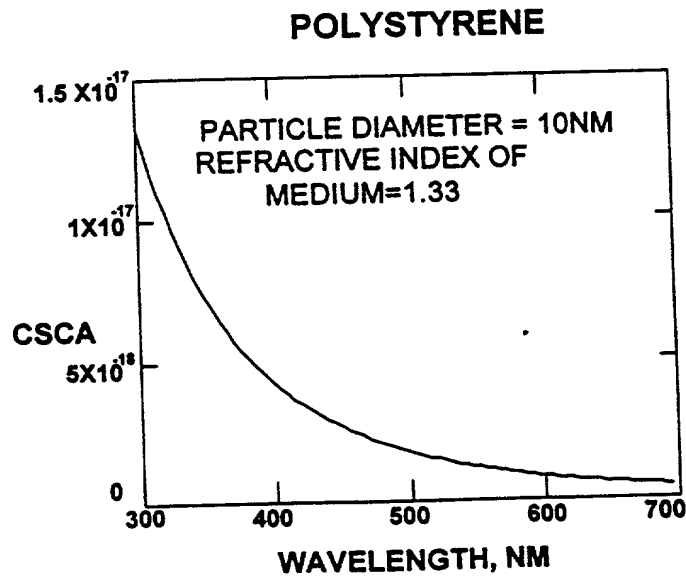
**IV. SELECT  
PARTICLE  
TYPE(S)**

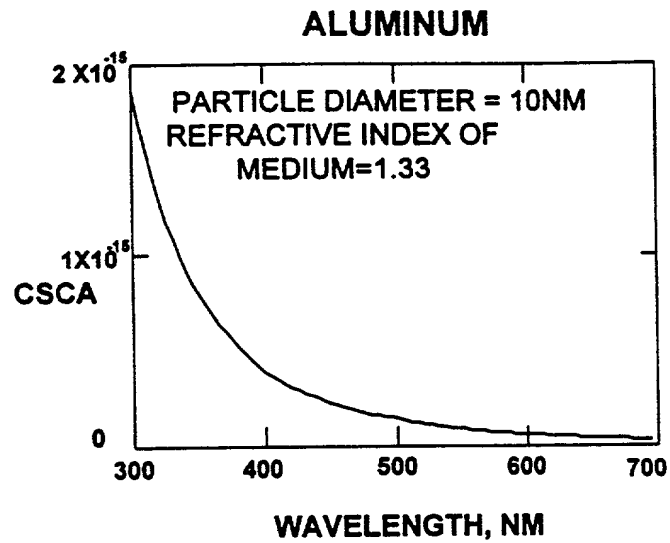
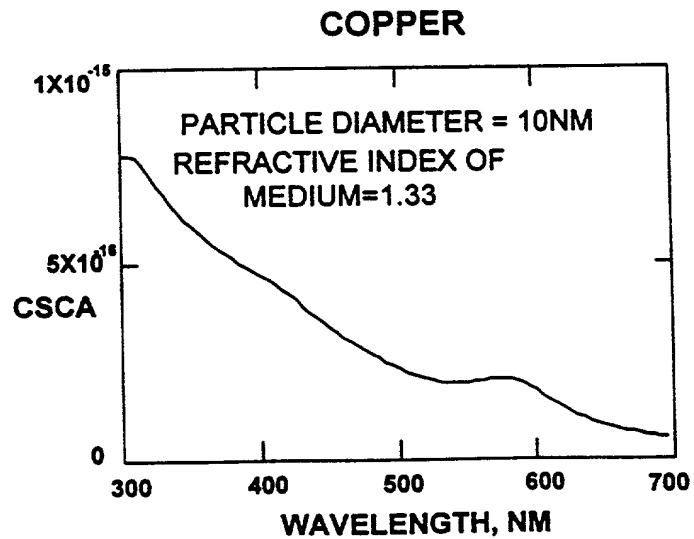
SELECT PARTICLE TYPE(S) TO ACHIEVE ANALYTE DETECTION REQUIREMENTS WITH THE DEFINED APPARATUS MEANS.

**APPARATUS AND TESTS KITS  
(DESIRED ANALYTE DETECTION REQUIREMENTS  
ACHIEVED)**

**FIGURE 25**



**FIGURE 26C****FIGURE 26D**

**FIGURE 26E****FIGURE 26F**

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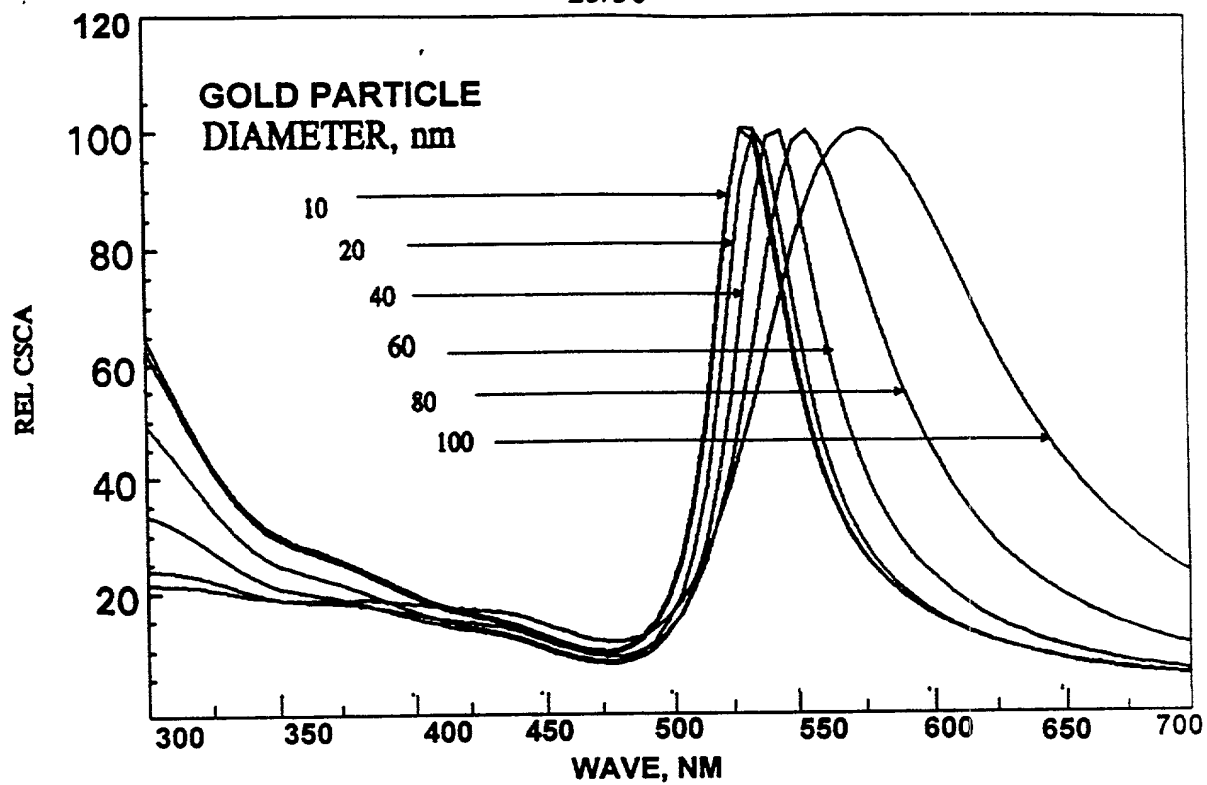


FIGURE 27

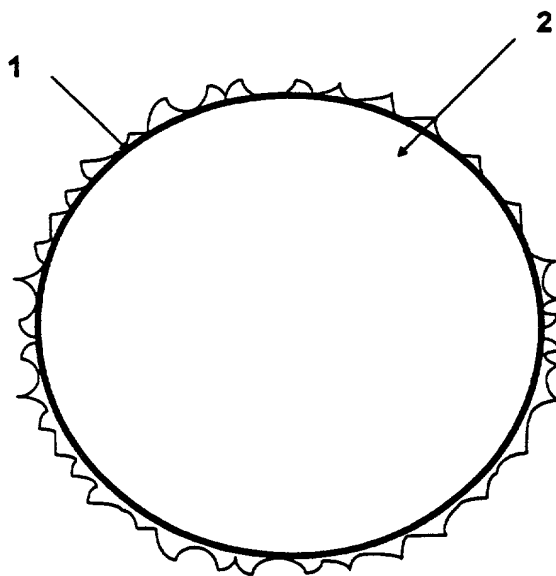


FIGURE 28

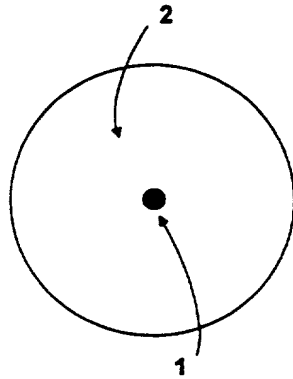


FIGURE 29A

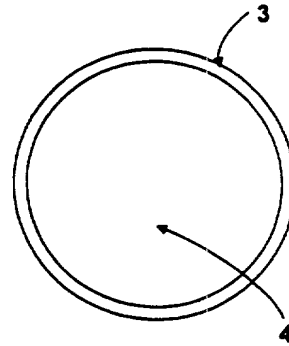


FIGURE 29B

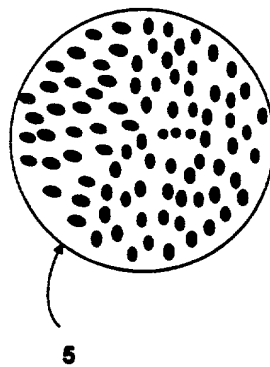
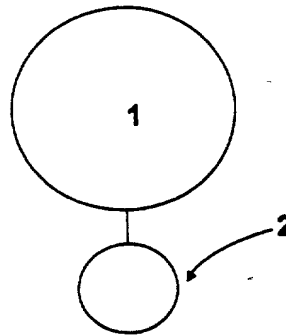
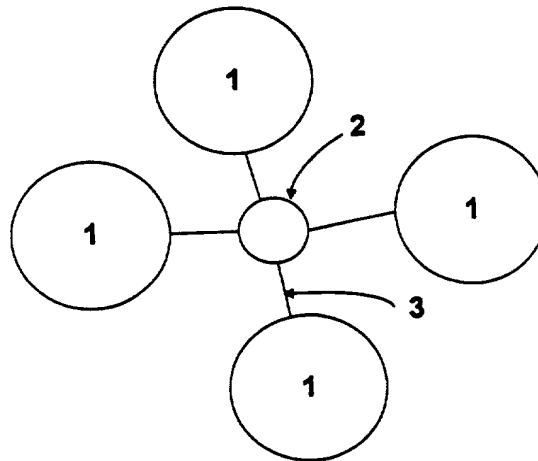


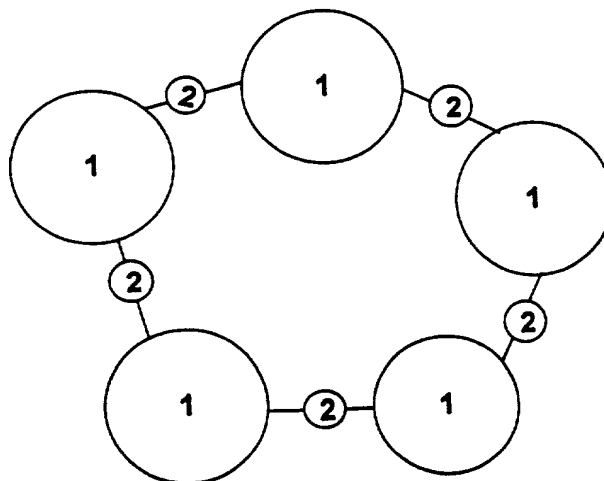
FIGURE 29C



**FIGURE 30A**



**FIGURE 30B**



**FIGURE 30C**

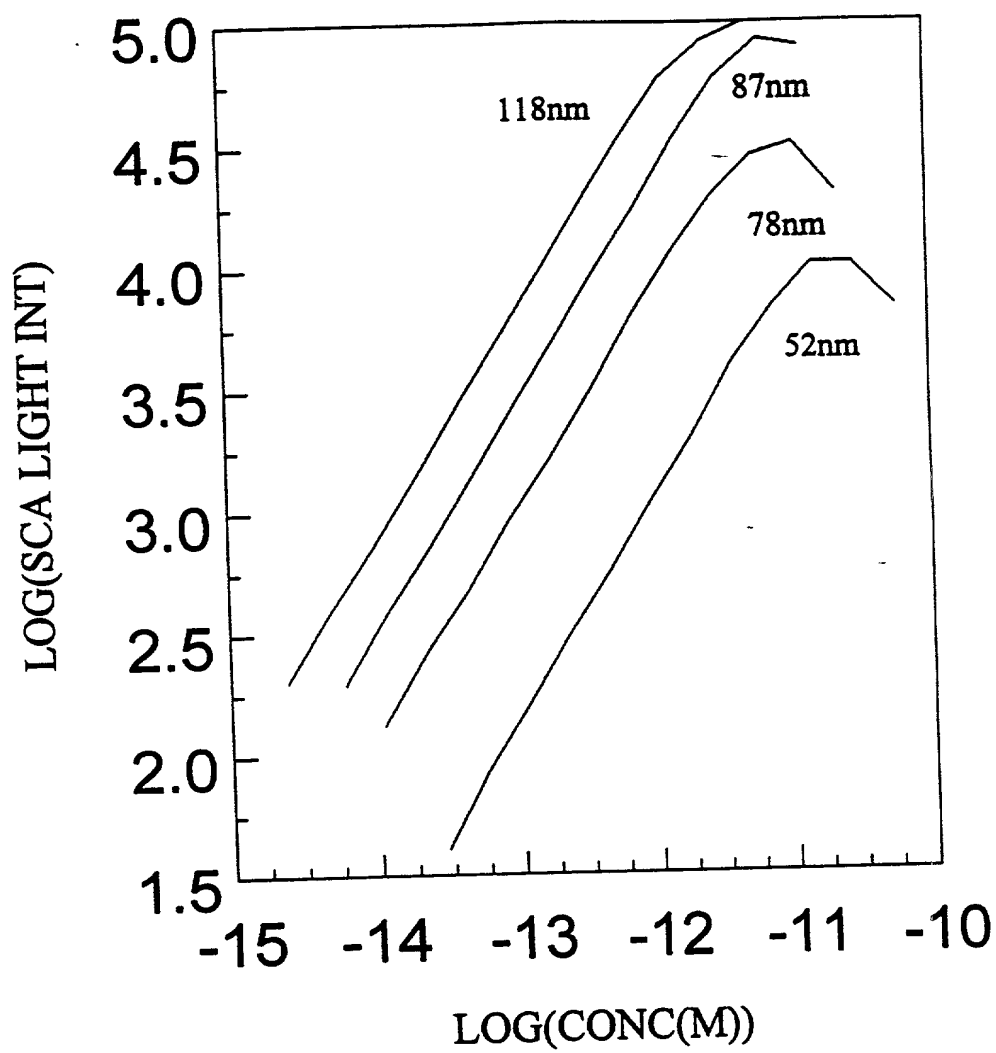


FIGURE 31

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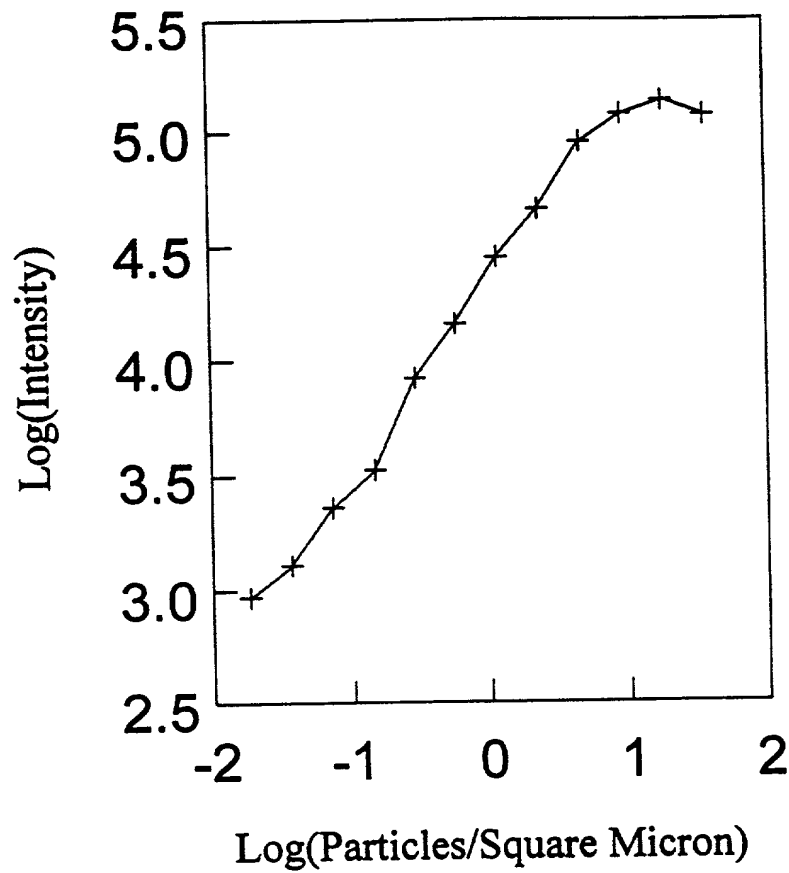


FIGURE 32

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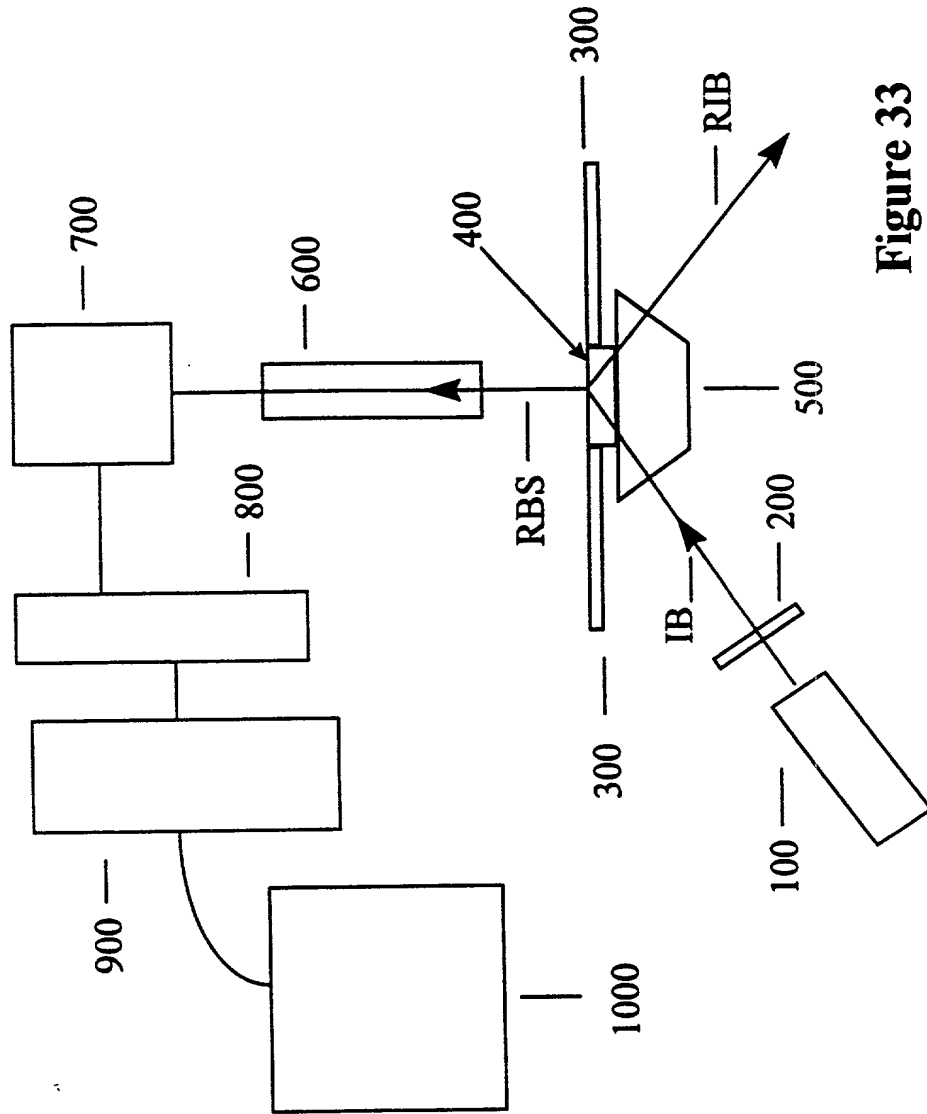
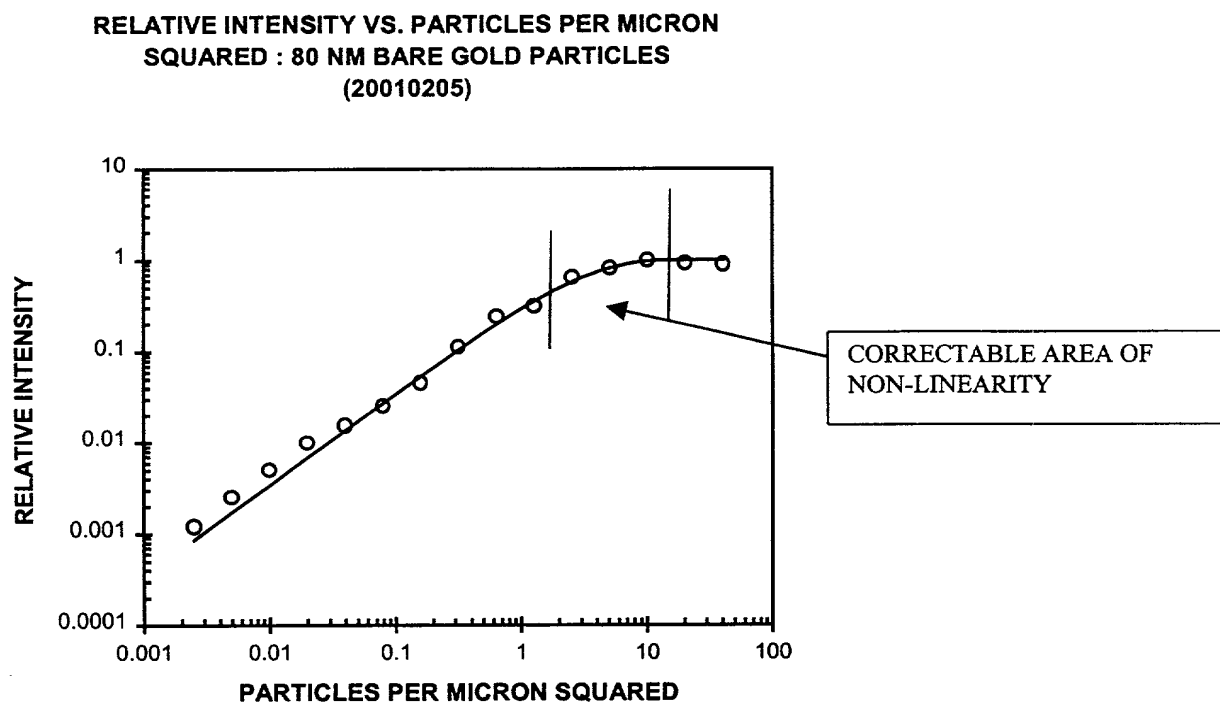


Figure 33

Figure 34



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